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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,645	08/10/2001	Philip T. Hughes	P 274260 DIV4-P7100 US/4	5435
909	7590	02/23/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			MURPHY, RHONDA L	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,645

Applicant(s)

HUGHES ET AL.

Examiner

Rhonda Murphy

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on 12/1/05. Accordingly, claims 1-36 have been canceled and claims 37-72 have been newly added.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 37 – 72 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-10, 14-19 and 21-25 of U.S. Patent No. 6,553,020. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would be obvious to one skilled in the art to realize the "highly directional antennas" are "wireless transmitting means"; the "radio

subsystem" is the "receiving means"; and a "switch" is "means for determining if a signal received by said node includes information for another node and causing said information to be transmitted", as cited in claim 37 of the instant application.

Regarding claims 37 and 51, Hughes teaches a node for use in a communications system comprising a plurality of nodes wherein each node is capable of communicating with plural other nodes via point-to-point wireless transmission links between the nodes, the node comprising: a plurality of highly directional antennas; a single radio subsystem for providing radio output signals for transmission via the antennas and for receiving signals received via the antennas to provide output signals from the radio subsystem; and, a switch for switching the output of the radio subsystem to a selected one of the antennas for transmission of a radio signal output by the radio subsystem by said selected antenna and for switching an input of the radio subsystem to a selected one of the antennas such that a signal received by said selected antenna is passed as an input to the radio subsystem; whereby the direction of transmission from said node to another node in the communications system and the direction of reception to said node from another node in the communications system is determined by operating the switch to switch to the appropriate antenna of said node (claim 1).

Regarding claims 38 and 52, Hughes teaches said node has plural links to other nodes, each of said plural links between respective pairs of nodes being associated with a time slot (claim 1).

Regarding claims 39 and 53, Hughes teaches each link for each node associated with a distinct time slot (claim 1).

Art Unit: 2667

Regarding claims 40 and 54, Hughes teaches the allocation of time slots to the links can be varied such that a link may selectively be associated with more than one time slot (claim 23).

Regarding claims 41 and 55, Hughes teaches said node having a direct line-of-sight link with at least one other node such that said node can transmit a signal to another node in line-of-sight with said node (claim 21).

Regarding claims 42 and 56, Hughes teaches said node comprising a transmitter arrangement constructed and arranged to transmit a signal including said information to another node if and only if a signal received at said node includes information for another node (claim 22).

Regarding claims 43 and 57, Hughes teaches said node is stationary (claim 2).

Regarding claims 44 and 58, Hughes teaches said node arranged to be in a transmission mode for a time period which alternates with a time period for a reception mode. (claim 4).

Regarding claims 45 and 60, Hughes teaches each node arranged not to transmit to any other node information in a signal received by said one node when that information is addressed to said at least one node (claim 25).

Regarding claims 46 and 61, Hughes teaches said node having an addresser constructed and arranged to add to information in a received signal the address of a node to which a signal including said information is to be routed when said information is for another node (claim 5).

Art Unit: 2667

Regarding claims 47 and 62, Hughes teaches the addresser including a route determiner constructed and arranged to determine the route of information through the system and to add an appropriate address to the information accordingly (claim 6).

Regarding claims 48 and 64, Hughes teaches said node having a processor constructed and arranged to determine if a received signal includes information for said node and to process information in a signal addressed to said node (claim 8).

Regarding claims 49 and 65, Hughes teaches the radio subsystem arranged to transmit signals at frequencies greater than about 1 GHz. 50 (claim 9).

Regarding claims 50 and 66, Hughes teaches the link between two nodes arranged to use simultaneously two or more frequency channels (claim 10).

Regarding claim 59, Hughes teaches at least one node arranged not to transmit to any other node information in a signal received by said at least one node when that information is addressed to said at least one node (claim 24).

Regarding claim 63, Hughes teaches a central system controller constructed and arranged to determine the route of information through the system (claim 7).

Regarding claim 67, Hughes teaches each node as substantially identical (claim 14).

Regarding claim 68, Hughes teaches the system connected to a conventional trunk network for providing access to other networks (claim 15).

Regarding claim 69, Hughes teaches a further node connected by a data connection to one of the nodes of the system and arranged to transfer a signal to or receive a signal from the trunk network or both (claim 16).

Regarding claim 70, Hughes teaches a data storage server connected to or provided at a node (claim 17).

Regarding claim 71, Hughes teaches at least one link of a node arranged to use a first transmission frequency and at least one other link of said node is arranged to use a second transmission frequency (claim 18).

Regarding claim 72, Hughes teaches some of the nodes allocated to subscribers and some of the nodes are not allocated to subscribers, at least some of said non-allocated nodes being solely for carrying information traffic between subscriber nodes (claim 19).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy
Examiner
Art Unit 2667

RM


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